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### Paper:

Hossain, M. & Dwivedi, Y. (2015). Determining the consequents of bank's service quality with mediating and moderating effects: an empirical study. *Total Quality Management & Business Excellence*, 26(5-6), 661-674.

<http://dx.doi.org/10.1080/14783363.2013.870783>

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**Abstract**

Customer satisfaction (CS) and customers' continuance intention (CI) (i.e. customer loyalty) are the two most-researched consequents of service quality (SQ); generally, SQ directly influences CS and CI. However, retail marketing and information system (IS) theories do challenge this notion; SQ dimensions are basically based on expectations or perceptions which need to be judged in an interim stage (i.e. confirmation) in the satisfaction-continuance process. Hence, the current study investigates the role of confirmation – through direct, mediating, and moderating effects – in service quality context. Applying positivist epistemology and using empirical approach, this research validates the developed SQ model with PLS-based SEM; data were collected from Australia and Bangladesh. The results find that SQ dimensions are evaluated in *confirmation* stage, which eventually affect CS and CI. Also, *confirmation* moderates the relationship between CS and CI; similarly the mediating effect of *confirmation* on CS and CI are established. The primary contribution of this study is the application of expectation-confirmation-satisfaction concepts from three popular theories from Marketing and Information Systems in SQ domain. Moreover, this research presents practical contributions.

**Keywords** Service quality, customer satisfaction, continuance intention

## 1. Introduction

Customer satisfaction (CS) is one of the earliest research topics (Oliver, 1980) and still maintains its importance among the researchers and practitioners. However, Hossain and Quaddus (2012) argue that “*The real intention ... is not to evaluate CS but to study the underlying rationale for customer retention; because it is believed that the more satisfied the customers are, the more loyal they will be which in turn develops a more likelihood of repurchasing that product/service*” (p. 442). Satisfied customers tend to generate positive word-of-mouth promotion for the product/service/company (Newman, 2001). Therefore, CS can lead to customer gain, and retention and loyalty, and undoubtedly helps in realizing organizational goals (Dabholkar et al., 2000). While explaining CS, especially on service marketing, literature found that one of the most effective antecedents of CS is *service quality* (SQ) – the better the quality of a service the better is the probability and level of satisfaction - perceived by the customers (Dabholkar et al., 2000; Grönroos, 1984; Jun & Cai, 2010; Lo & Chai, 2012; Santouridis, Trivellas, & Reklitis, 2009; Saravanan & Rao, 2007). More precisely, prior literature espoused that CS can be ensured “through total quality management approach” (Lenka, Suar, & Mohapatra, 2010; Saravanan & Rao, 2007; van Iwaarden & van der Valk, 2013). In short, prior studies found that SQ positively impact CS; and CS positively affects customers’ continuance intention (CI). Yet, some studies investigated the direct effect of SQ on CI and found positive influence. Hence, SQ may have positive and direct effect and also may have indirect effect (through satisfaction) on customer retention which leads some researchers to check the mediating effect of SQ between CS and CI (e.g. Águila-Obra et al., 2013). Moreover, the moderating effect of several constructs between SQ and CS is also noticeable.

Defining SQ, prior studies claim it to be the *perceptions* of the service-receivers about the service and its presenter, while some other posit it to be *expectations*. ‘Expectation’ is a popular construct in Marketing and extensively used for examining repurchase intention. For instance, expectation confirmation theory (ECT) (Oliver, 1980), one of the most popular theories in Marketing examines customer expectation to evaluate repurchase intention. Similarly, perception about the service (e.g. perceived usefulness) is popular in information system (IS) research. Expectation confirmation model (ECM) that is popularly used in IS research examines users’ perceptions evaluating IS users’ CI (Bhattacharjee, 2001). Both theories used CS as an intermediate construct between expectation and continuance; they examined CS through ‘confirmation’. Confirmation is defined as the discrepancy between performance and expectation (Hossain & Quaddus, 2012). Marketing and IS researchers posit that, if performance exceeds expectation (or perception), positive disconfirmation occurs, which affects satisfaction; and vice versa. Both theories emphasised *confirmation* and suggested not measuring CS directly from *expectation* but through *confirmation*. Similarly, innovation diffusion theory (IDT), a very popular theory in IS, argues that, adopters evaluate their adoption-decision at *confirmation* stage (Rogers, 2003). Therefore, *confirmation* stage is very important for any service-offering industry because by attending the customers in confirmation stage properly,

firms can redirect customers from 'non-recursive' into 'recursive' customers. Therefore, evaluation of expectations at confirmation is important. However, to best of our knowledge, service quality researchers lag adapting the same approach; the current study intends to close this research-gap.

## 2. Literature Review

*"Everything that banking institutions do to serve their customers"* (Johnston, 1995, p. 2164). Unlike other industries, banking industry is highly competitive; where the banks are not competing only among each other, but also with non-banking and other financial institutions such as finance and leasing firms. More challengingly, each branch of a same bank needs to compete with the other branches. Moreover, due to the policies of the central bank, all commercial banks offer nearly the same services. Therefore, over a period of time they become nearly the same – which is called 'institutional isomorphism' (DiMaggio & Walter, 1983). As a result, compared with the past, it is difficult for the banks to attain a competitive advantage which is even more difficult to sustain because most of the services are re-producible. One of the most useful tool to combat fierce competition and to gain a competitive edge in retail banking is providing service quality (SQ) to the customers (van Iwaarden & van der Valk, 2013; Palmer & Cole, 1995). Therefore, a number of attempts were made to understand SQ and its impact in different service industries; service quality (popularly called as SERVQUAL) models provide theoretical understanding on it.

Like many other service industries, banking sector too realizes that CS is critical and hence considers offering quality services as a highest priority, and highest challenge as well. Addressing the contemporary need, a significant number of studies have been produced to understanding SQ in banking institutions (Caruana, 2002). However, most of the researches are primarily obsessed defining and measuring its dimensions with the aim of improving the context-oriented quality of service (Dabholkar et al., 2000). Garcia and Caro (2010) reported that measuring SQ is a recurrent topic in recent management literature. However, an increasing number of researches look at the outcome variables of service quality; the most common are customer satisfaction and customer retention. In these studies, more or less, unison is observed: SQ has a direct influence on customer retention (e.g. Taylor & Baker, 1994; Caruana et al., 2000); while some other studies investigated the indirect effect of SQ, through satisfaction, on customer loyalty - which inspired some researchers to study the mediating effect.

In general, service quality (SQ) is defined as the customer's subjective judgment about a service's *"overall excellence"* (Lo & Chai, 2012; Zeithaml et al., 1996); perceptions are the basis of subjective judgement (Ganguli & Roy, 2013). Oxford dictionary defines perception as "the way in which something is regarded, understood, or interpreted". Hence, service quality is a concept that is understood by the customers to form subjective judgements toward the service they expect from a service provider. To simply, SQ explains the overall perceptions and expectations of the service-seekers. In fact, numerous researchers identified SQ is perception-based while some other coloured it as the expectation (see Cronin Jr & Taylor, 1992). Regardless, service providers (e.g. banks) should not only serve the needs but also have to surpass the expectations of the customers by understanding their perceived needs (Johnston,

1995). Fortunately, SERVQUAL model explain the expectations and perceptions of the customers regarding the expected quality of services offered.

General Marketing and IS studies also put effort to understand customers' repurchase intention and users continuance intention, respectively. Two legendary theories assist the researchers and practitioners in this regard: expectation confirmation theory (ECT) in Marketing and expectation confirmation model (ECM) in IS – however, ECT is the fundamental base of ECM (Hossain & Quaddus, 2012). Both ECT and ECM posit that retention/continuance of customers/users is largely dependent on *satisfaction* derived from using the product/IS. ECT believes that *satisfaction* is the difference between performance of and expectation to the product. Similarly, ECM contextualizes that, IS users' satisfaction can be derived by comparing performance and (post-acceptance) perceived usefulness of the IS. Both, however, agree that; if performance exceeds expectation/perception, positive disconfirmation results; which eventually leads to satisfaction - and vice versa. The process of both ECT and ECM is as follows: expectation/perception -> confirmation -> satisfaction -> repurchase/continuance. Similarly, one of the most popular IS theories called innovation diffusion theory (IDT) argues that, in confirmation stage the adopters evaluate their adoption-decision which is followed by rejection/continued use. The main argument of the abovementioned theories is: users do evaluate their (dis)satisfaction or continuance at confirmation stage; in other words, satisfaction or continuance is the result of the outcome obtained at confirmation stage. Marketing scholars claimed that, this is a better way of investigating into CS.

### **3. Research Model and Hypotheses Development**

This research developed a model integrating the dimensions of service quality (from the context of retail banks) and investigated its consequents. From the arguments presented in the 'literature review' section, the current study identifies *service quality* as a notion of the customers' perception (or expectations) on the overall excellence or superiority of the service provider (e.g. retail bank) (adapted from Brady & Cronin, 2001). In this section, first, we will identify the dimensions of service quality, then, present the structural model while developing the hypotheses.

#### **3.1 Dimensions of service quality**

Newman (2001) proposed that “*the increasing competition, technology, social and cultural factors are the chief drivers of service quality initiatives*”; following the spirit if this comment, at the earlier stage of the same research, the current study developed the dimensions of service quality (see Hossain et al., 2013 for details); the current study uses those dimensions. However, we did not develop the “drivers” but the dimensions of SQ that explain “the complexity of the construct” (García & Caro, 2010). In that study, we found that, SQ of banks can be examined as a third-order hierarchical model which is reflected by *station quality*, *interaction quality*, and *outcome quality*. Moreover, the second-order dimensions of SQ are reflected by nine first-order dimensions; *station quality* is reflected by corporate image, tangibles, and accessibility; *interaction quality* is reflected by reliability, assurance, empathy, responsiveness; *outcome quality* is reflected by functional and tactical benefits (Ganguli & Roy, 2013). In this current study we used the 32 items from that study.

### 3.2 Hypotheses Development

The relationship between service quality (SQ) and *customer satisfaction* (CS) has gained huge attention in literature. In any organization, CS is considered as an immediate consequence of SQ (Caruana, 2002; Caruana et al., 2000; Johnston, 1995). There are a handful of studies that find a positive relationship between SQ and CS (Akter et al., 2013; Johnston, 1995; Jun & Cai, 2010); especially in service oriented industries. The same findings are prominent in banking as well (Caruana, 2002; Miguel-Dávila et al., 2010; Reimer & Kuehn, 2005; Taylor & Baker, 1994; Yavas et al., 2004; Yavas et al., 2004). Therefore, this study hypothesizes that:

**H1** *Service quality is positively associated with service satisfaction*

Continuance intention refers to a customers' plan of using the service rather than discontinuing or switching to another alternative. Other studies too supported that SQ can has a direct impact on continuance intention of the customers (Akter et al., 2010; Kettinger et al., 2009); however, most studies, like us, measuring continuance behaviour used *intention* – not the *actual* use (Akter et al., 2010). This leads to the following hypothesis:

**H2** *Service quality is positively associated with continuance intention*

Expectation confirmation theory (ECT) posits that, after using a product/service, customers determine to what extent their expectations are confirmed (*confirmation*). Hence, ECT finds a positive relationship between *expectation* and *confirmation*. However, expectation confirmation model (ECM) posits a reverse relationship where it finds that, user's *perceived usefulness* is positively associated with *confirmation*. In the current study, we adopted ECT's approach. Here, we posit that, after experiencing the banking services, customers assess the bank's perceived performance vis-à-vis their original expectations. Hence, we develop the following hypothesis:

**H3** *Service quality is positively associated with confirmation*

Like ECT the current study posits that user satisfaction is determined by two constructs: expectation of the customers and confirmation of expectation; the first relationship is already covered by hypothesis 1. To develop our next hypothesis we argue that, the basis of measuring satisfaction is expectation which is evaluated against confirmation-status assessed by the customers. Hence, we infer that, *confirmation* is positively related to *satisfaction* because "it implies realization of the expected benefits" of the banking services, while disconfirmation (perceived performance lags expectation) denotes failure to achieve expectation – hence form dissatisfaction. As such, positive disconfirmation is expected to strengthen adopters' subjective response; *satisfaction*. Prior studies found that *confirmation* as one of the key variables affecting CS (McKinney et al., 2002; Oliver, 1980). Therefore, it is logical to propose the next hypothesis as:

**H4** *Customers' extent of confirmation is positively associated with service satisfaction*

According to ECT and ECM, consumers form a feeling of (dis)satisfaction based on their (dis)confirmation level; positive confirmation leads to satisfaction which ultimately affects continuance intention; therefore, a direct relationship between *confirmation* and *continuance* can be valid as well. The main arguments here is, when a customer finds that most of his

expectations are confirmed, he does not necessarily go through the satisfaction process; rather, may intent to continue using the service (Yi, 1990). Therefore, this research posits that:

**H5** *Confirmation is positively associated with continuance intention*

It is believed that consumers' overall satisfaction or dissatisfaction forms their post-purchase intention; whether to complain, repurchase, not to purchase, or a combination of any (Mohammad Alamgir Hossain & Quaddus, 2012). Prior studies found that satisfaction has direct impact on customer retention (Wang et al., 2004). The similar notion is made in ECT and ECM Users. Therefore, we develop that:

**H6** *Satisfaction is positively associated with continuance intention*

Service quality researchers investigate a number of mediators' effect on SERVQUAL models. For instance, Akter et al. (2010) investigated the mediating role of satisfaction on continuance, and quality of life; similarly, Caruana (2002) and Águila-Obra et al. (2013) found that satisfaction mediates the relationship between SQ and CI and loyalty, respectively. However, here, we propose a mediating effect of confirmation between continuance and satisfaction.

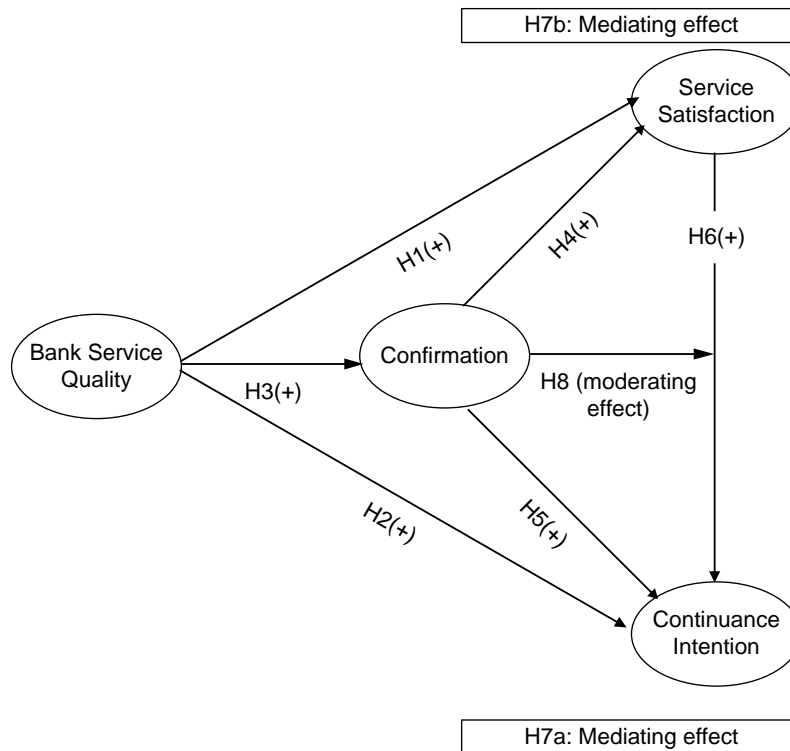
**H7a** *Confirmation mediates the relationship between service quality and satisfaction (mediating effect)*

**H7b** *Confirmation mediates the relationship between service quality and continuance intention (mediating effect)*

SQ literature is comparatively scarce investigating the moderating effect; however, Caruana et al. (2000) investigated the moderating role of *value* between SQ and CS. In this study we examine the moderation effect of confirmation on the relationship between satisfaction and continuance assuming that variation in confirmation status influences the strength and/or the direction of the relationship between *satisfaction* and *continuance*; and postulates that:

**H8** *Confirmation moderates the relationship between satisfaction and continuance intention (moderating effect)*

The developed model with the hypotheses is presented in Figure 1.



**Figure 1** Research model with the hypotheses

#### 4. Research Methodology

This research adopted positivist epistemology. A research can be called positivist if there is evidence of formal propositions, quantifiable measures of variables, formulation of hypothesis, hypothesis testing, and drawing of inferences about a phenomenon from the sample to a stated population (Orlikowski & Baroudi, 1991). Methodologically, empirical approach is adopted.

##### 4.1 Measurement Instruments

As mentioned before, the items of service quality have been used from a prior study (Hossain et al., 2013), which developed the items from prior studies (e.g. Aldaigan & Buttle, 2002) and an extensive field study conducted in Australia and Bangladesh. The items of satisfaction and continuance are adapted from prior Marketing (specifically service quality) and IS studies (Aker et al., 2010, 2013; Bhattacharjee, 2001; Caruana, 2002). All the items used in this study are reflective.

##### 4.2 Preparing the Questionnaire

The questionnaire was primarily developed in English. However, for the Bangladeshi respondents, the questionnaire has been translated into Bengali. A certified professional translator from English-to-Bengali has translated the questionnaire. The survey used Likert based questionnaire ranging from 1= "Strongly Disagree" to 5= "Strongly Agree." The questionnaire consisted positive statements while the two items (STF3, CI3) were reversed coded to check the common method bias (CMB).



#### 4.3 Pilot testing

As suggested by Frazer and Lawley (2000), to test the validity of the questionnaire and to rectify any measurement-problem, the questionnaire was pilot-tested with thirteen (11) people. Six questionnaires were distributed to a group of researchers from multi-disciplines on the basis that “they understand the study’s purpose and they have similar training as the researcher” (Frazer & Lawley 2000, p.34) while two ‘laymen’ were considered as well. As for the potential respondents, three questionnaires were distributed among some randomly selected bank-customers to ensure the questions were applicable and relevant to the research topic. Based on the feedback, some modifications were made to the questionnaires.

#### 4.4 Sampling

Data were collected from both Australia and Bangladesh. To be precise, 150 questionnaires have been distributed in five suburbs of Perth, Western Australia. In Bangladesh, a total of 250 questionnaires were distributed among random customers of three banks (in Dhaka, and Sylhet). Data screening method eliminated 58 incomplete questionnaires that resulted 347 useful sample.

#### 4.5 Data Examination

This study split the responses into Wave 1 (Australian responses) and Wave 2 (Bangladeshi responses). We used the Mann-Whitney U test (M-W) test to compare the sample distributions at item level. As shown in Table 1, the K-S test for the selected factors are non-significant, with only two exceptions – SQ2 (participation in CSR activities), and SQ11 (convenient opening hours). In fact, the perceptions of the customers should be different in the two participating countries; in Australia most of the banks participate in CSR activities; and/or the customers follow the CSR activities of the banks which is not necessarily true in Bangladesh. Similarly, Australian banks keep open some of their branches during weekends or after-hours which is not available in Bangladesh. The overall non-significant M-W test suggests that the sample distributions of the two independent groups do not differ statistically – that means, we can add the responses to conduct the empirical data-analysis.

**Table 1** The result of the Mann-Whitney U test for Wave 1 and Wave 2 sample

	<b>Z-value</b>	<b>p-value</b>
Reputation of the bank	0.485	0.96
Involvement in CSR activities	2.61	0.00
The bank is dependable	0.875	0.496
Convenient operating hours	1.921	0.001
Overall, my expectations are confirmed	1.19	0.168
I am satisfied with this bank	0.63	0.854
I intend to continue	0.89	0.431

#### *4.6 Data Analysis Technique*

Empirical data were analyzed using PLS-Graph. Component-based structural equation modelling (SEM) using PLS has been used for path modelling and hypotheses test. PLS is adopted considering its suitability over covariance-based SEM with regard to model complexity, sample size, and distributional properties (Akter et al., 2010; Chin, 2010).

As per the PLS procedure, both assessment of the measurement model and structural model have been examined. While assessing the measurement model, the model was tested for convergent validity (at construct level as well as at item level) and discriminant validity. Convergent validity includes item reliability, and internal consistency (by measuring composite reliability (CR) and average variance extracted (AVE)). For assessment of the structural model, path coefficient ( $\beta$  value), the value of  $t$ -statistics, and the explanatory power of the independent variables ( $R^2$ ) were checked.

### **4. Results**

#### *Assessment of Measurement Properties*

Referring to Igbaria et al. (1995) this study considered 0.6 as acceptable item-loading. All items resulted accepted loading. Then, CR and AVE were checked to assess the internal consistency of the model. In this study, all the constructs exceeded acceptable 0.7 CR and 0.5 AVE values. Table 2 shows the loading of the items, CR, and AVEs of the constructs. Moreover, to check the discriminant validity, we checked the inter-correlation among the constructs; the square root of each construct is found to be higher than the variance shared between the relevant construct and other constructs in the model - which confirms discriminant validity (Chin, 2010).

**Table 2** Results of psychometric properties of the constructs

<i>Constructs</i>	<i>Items</i>	<i>Loading</i>	<i>CR</i>	<i>AVE</i>
Service quality	SQ1. Reputation	0.781	0.781	0.57
	SQ2. CSR activities	0.641		
	SQ3. Financial solvency	0.723		
	SQ4. Overall brand image	0.69		
	SQ5. Visually appeal of Bank's physical facilities	0.704	0.804	0.676
	SQ6. Modern equipment and instrument	0.825		
	SQ7. Employees are well-dressed and appear neat	0.612		
	SQ8. Convenient branch-locations	0.676	.802	0.577
	SQ9. Online banking facility	0.868		
	SQ10. Availability of ATM	0.721		
	SQ11. Convenient operating hours	0.674		
	SQ12. Parking facility	0.774		
	SQ13. Provides service as they promise	0.746	0.777	0.538
	SQ14. Shows sincere interest at problems	0.683		
	SQ15. The bank is dependable	0.768		
	SQ16. The behaviour of employees instils confidence	0.792	0.799	0.571
	SQ17. Feel safe in transactions	0.711		
	SQ18. Staff have knowledge answering questions	0.762		
	SQ19. Security/monitoring devices	0.611		
	SQ20. Bankers give individual attention	0.872	0.866	0.763
	SQ21. Staff put effort understanding my needs	0.876		
	SQ22. Employees are polite/courteous	0.716		
	SQ23. Information easily obtainable	0.772	0.862	0.611
	SQ24. Prompt services/short waiting period	0.778		
	SQ25. Willingness to help of branch staff	0.738		
	SQ26. Employees happily reply to query	0.835		
	SQ27. Wide range of products and services	0.687	0.865	0.685
	SQ28. Overall, the services are useful	0.885		
	SQ29. Understanding customer needs	0.894		
	SQ30. The policies are stable	0.690	0.971	0.841
	SQ31. Attractive interest rates for savings	0.85		
	SQ32. Reasonable interest rates for credits	0.855		
Confirmation	CFM1. My experience is better than what I expected	0.842	0.932	0.842
	CFM2. The service level is better than what I expected	0.846		
	CFM3. Overall, most of expectations were confirmed	0.780		
Satisfaction	How do you feel about your overall experience?			
	STF1. Very dissatisfied	0.844	0.924	0.790
	STF2. Very displeased	0.829		
	STF3. Absolutely terrible	0.872		
Continuance intention	CI1. I intend to continue rather than discontinue	0.824	0.911	0.839
	CI2. I intend to continue than alternative means	0.921		
	CI3. If I could, I would like to discontinue	0.907		

### Assessment of the Structural Model

Table 3 demonstrates that all the hypotheses, except service quality (SQ) to continuance intention (CI), are accepted. Moreover, the model explains 44.8% of *confirmation*, 35.7% of *satisfaction*, and 38.12% of the variance ( $R^2$ ) of the *continuance intention* – all  $R^2$  values satisfy the required 10% cut-off value. The obtained  $R^2$  value is “moderate”; moderate  $R^2$  is acceptable for an endogenous latent variable with only a few exogenous latent variables (Henseler et al., 2009).

**Table 3** Evaluation of the structural model and research hypotheses

Hypothesis		$\beta$ -value	t-value	Result
H1	Service quality to customer satisfaction	0.840	21.29**	Supported
H2	Service quality to continuance intention	0.042	1.07	Not supported
H3	Service quality to confirmation	0.804	13.614**	Supported
H4	Confirmation to customer satisfaction	0.891	14.814**	Supported
H5	Confirmation to continuance intention	0.913	22.772**	Supported
H6	Customer satisfaction to continuance intention	0.451	3.2*	Supported

Significant at \* $p < 0.005$ ; \*\* $p < 0.001$

### Assessment of the Mediating Effect

This study used Baron and Kenny’s (1986, p. 1177) method as the guideline for developing a mediating construct and examining its effect. According to them, mediation occurs when the: (1) the independent variable (SQ) has a significant effect in the presumed mediator (confirmation): (H3); (2) the mediator (confirmation) significantly influence the dependent variable (satisfaction, and continuance intention) (H4, H5); and (3) the predictor (SQ) has significant influence on the criterion variable in the absence of the mediator’s influence (H1, H2) (see Figure 2a).

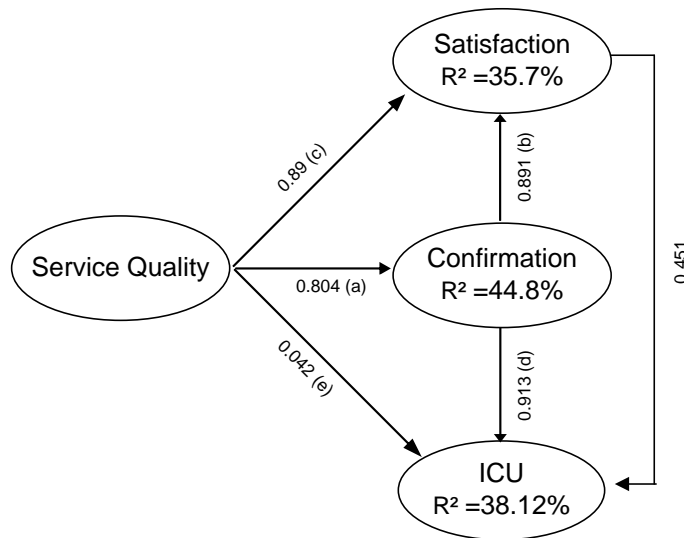
To establish the mediating effect of confirmation, the indirect effect of (a x b) has to be significant for the SQ->STF link; and (a x d) has to be significant for the SQ->ICU link. In this regard, the z statistic (Sobel 1982) is calculated; z value greater than 1.96 ( $p < 0.05$ ) will support the mediating effect. The z value is formally calculated as follows:

$$z_{SQ \rightarrow STF} = \frac{a \times b}{\sqrt{(b^2 S_a^2 + a^2 S_b^2 + S_a^2 S_b^2)}} = 17.78; z_{SQ \rightarrow ICU} = \frac{a \times d}{\sqrt{(d^2 S_a^2 + a^2 S_d^2 + S_a^2 S_d^2)}} = 21.39$$

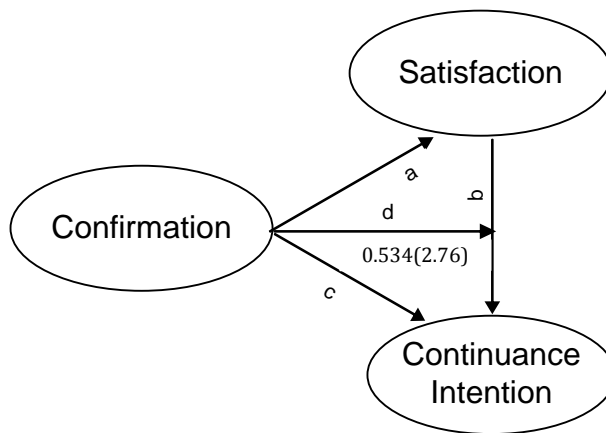
The result supports both H7a and H7b. However, the effect is partial for satisfaction (because of the significant direct effect of SQ on satisfaction) and full on continuance. Further, to estimate the size of the indirect effect, the variance accounted for (VAF) value is extracted, which

represents the ratio of the indirect effect to the total effect. The VAF value indicated that 44.60% of the total effect of *confirmation* on *customer satisfaction* and 45.10% of the total effect of *confirmation* on *continuance intention* is explained by confirmation.

$$VAF_{SQ \rightarrow STF} = \frac{a \times b}{a \times b + c} = 0.446; VAF_{SQ \rightarrow ICU} = \frac{a \times d}{a \times d + e} = 0.451$$



**Figure 2a.** Mediating effect of confirmation between service quality and customer satisfaction; and between service quality and continuance intention



**Figure 2b.** Moderating effect of confirmation between satisfaction and continuance intention

### Assessing the Moderating Effects

Finally, using PLS product-indicator approach, we examined the moderating effect of *confirmation* on the relationship between *satisfaction* and *continuance intention*. To test the

possibility of such effect, satisfaction (predictor) and confirmation (moderator) were multiplied to create an interaction construct of 96 items (3 x 32) (Henseler & Fassott, 2010). Then, we estimated the influence of the predictor (satisfaction) on the criterion variable (ICU) (b), the direct effect of the moderator (confirmation) on the criterion variable (c) and the influence of the interaction variable (satisfaction x confirmation) (d) on the criterion variables (see Figure 2b). The significance of the moderator (CFM) is established if the interaction effects (path d) is meaningful, independent of the size of the other path coefficients (Henseler & Fassott, 2010). The CR and AVE of this interaction construct are 0.702 and 0.643 respectively, with a standardised path coefficient of 0.534 and *t*-value as 2.76 for the interaction construct (path d), which is significant at  $p < 0.01$ . Here, we used two-tailed test because literature is unanimous regarding the effect of CFM on the satisfaction-continuance process. For testing the moderating effect, finally, the *effect size* is calculated as follows:

$$f^2 = \frac{R_i^2 - R_m^2}{1 - R_i^2} = 0.01$$

The result of the effect size shows that the size of the moderating effect is medium (Kenny, 2013). Hence, it is confirmed that *confirmation* the relationship between *satisfaction* and *continuance intention*.

## 5. Discussion and Implications

### 5.1 Summary of Findings

According to the results, in retail banks, *service quality* has a significant positive impact on customers' *satisfaction* and *confirmation*. This finding implies that the customers of a bank feel satisfied when they receive quality service, and find that their expectations from the banks are confirmed. Therefore, it is important for the banks to continue/improve their service quality, as well as increase performance than the expectations. In other words, unnecessary promises should not be made because they increase expectation; if performance is not increased proportionally, dissatisfaction might occur. However, our results also show that *service quality* has a non-significant impact on *intention to continue* using the bank's services; this is an important finding: mere expectations or perceptions do not ensure that the customers will continue banking with the current bank; rather, the expectations have to be met. Hence, with aggressive and lucrative marketing, a bank may develop positive perceptions to the potential customers about the bank, and attract customers; but to retain them, their developed perceptions have to be confirmed; otherwise they will discontinue receiving the service.

Moreover, this research highlights that *satisfaction* has a significant positive impact on *intention to continue* with the bank's services. Therefore, banks should exploit strategies and policies to make the customers satisfied; nevertheless, service quality dimensions would assist in this regard. However, the non-significant relationship between *service quality* and *continuance intention* actually is supported by both ECT and ECM; both theories rejected such relationship. That means, upon receiving the services from a bank, customers do not form an immediate decision on continuance; rather, they go through the confirmation-satisfaction process.

Furthermore, the unique initiative of this research proves that *confirmation* is an intermediate stage where customers compare their expectations with the received performance of the bank. Hence, practically, this finding assists banking service providers to evaluate their performance vis-à-vis to the perceptions of the customers. Along with the direct impact of confirmation, the mediating and moderating role of confirmation is also innovative and worthy to discuss. The findings confirmed that *confirmation* explained about 44.6% of the total effect of service quality on *satisfaction* and about 45% of the total effect of *service quality* on *continuance intention*. Furthermore, a strong mediating role of *confirmation* was found between SQ-CS link and SQ-ICU link, confirming that it is important to measure *confirmation* separately from banking service quality when modeling the effects of quality on outcome constructs. This relationship also suggests that confirmation is critically important for examining CS and ICU.

## 5.2 Implications

The current research extends the existing body-of-knowledge in service quality (SQ) domain. Retail marketing and IS theories established that expectations or perceptions do not directly influence customer satisfaction and their continuance intention; rather, these are evaluated in an intermediate stage named 'confirmation. However, existing SQ studies investigate the role of SQ-dimensions directly on CS and ICU. As a significant theoretical contribution, we espoused the similar notion and validated it from empirical data obtained from Australia and Bangladesh. The final theoretical contribution of this study is examining and proving the mediating and moderating role of confirmation in the satisfaction-continuance process.

## 6. Conclusion

This study analyzed the consequents of service quality in the context of retail banking. This research found that, the continuance intention of bank customers is directly influenced by satisfaction and confirmation, while both confirmation and satisfaction are dependent on service quality. This study also conceptually argued and empirically validated that customers evaluate the performance of a bank against their perceptions or expectation; if performance exceeds expectations, satisfaction results and vice-versa. Hence, this research proposes a model and guideline to be used by the banking service providers so that they can better track the confirmation status of the customers.

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